

Title (en)
A SELF-ACTIVATING HYDROPROCESSING CATALYST HAVING ENHANCED ACTIVITY AND SELF-ACTIVATION CHARACTERISTICS AND ITS USE FOR TREATING RESID FEEDSTOCKS

Title (de)
SELBSTAKTIVIERENDER HYDROPROCESSING-KATALYSATOR MIT GESTEIGERTER WIRKSAMKEIT UND SELBSTAKTIVIERTUNGSFUNKTION UND DESSEN VERWENDUNG ZUR BEHANDLUNG VON RÜCKSTÄNDEN

Title (fr)
CATALYSEUR D'HYDROTRAITEMENT À AUTO-ACTIVATION PRÉSENTANT UNE ACTIVITÉ ACCRUE ET DES CARACTÉRISTIQUES D'AUTO-ACTIVATION, ET SON UTILISATION POUR LE TRAITEMENT DE CHARGES D'ALIMENTATION DE RÉSIDUS

Publication
EP 3215268 A1 20170913 (EN)

Application
EP 15801014 A 20151104

Priority
• US 201462075963 P 20141106
• US 2015058964 W 20151104

Abstract (en)
[origin: WO2016073560A1] A self-activating catalyst for treating heavy hydrocarbon feedstocks that comprises a calcined particle treated with a sulfoxide compound in the presence of hydrogen. The calcined particle comprises a co-milled mixture made by co-mulling inorganic oxide powder, molybdenum trioxide powder, and a nickel compound and then forming the co-milled mixture into a particle that is calcined to thereby provide the calcined particle. The calcined particle comprises from 1 to 10 weight percent molybdenum and nickel that is present in an amount such that the weight ratio of said nickel-to-molybdenum is less than 0.4. The calcined particle has a pore size distribution that contributes to the unique properties of the catalyst. The enhanced self-activating catalyst is used in the hydrotreating of heavy residue feedstocks that have high nickel, vanadium and sulfur concentrations.

IPC 8 full level
B01J 37/04 (2006.01); **B01J 23/883** (2006.01); **B01J 27/051** (2006.01); **B01J 27/19** (2006.01); **B01J 35/10** (2006.01); **B01J 37/00** (2006.01);
B01J 37/02 (2006.01); **B01J 37/08** (2006.01); **B01J 37/20** (2006.01); **B01J 37/28** (2006.01); **C10G 45/08** (2006.01)

CPC (source: CN EP KR US)
B01J 23/883 (2013.01 - EP KR US); **B01J 27/051** (2013.01 - KR); **B01J 27/0515** (2013.01 - EP KR US); **B01J 27/19** (2013.01 - EP KR US);
B01J 35/635 (2024.01 - EP US); **B01J 35/647** (2024.01 - EP US); **B01J 35/66** (2024.01 - EP US); **B01J 37/009** (2013.01 - EP KR US);
B01J 37/203 (2013.01 - EP KR US); **B01J 37/04** (2013.01 - EP KR US); **B01J 37/08** (2013.01 - KR); **B01J 37/088** (2013.01 - EP US);
B01J 37/20 (2013.01 - EP KR US); **B01J 37/28** (2013.01 - EP KR US); **C10G 45/08** (2013.01 - CN EP KR US); **B01J 23/883** (2013.01 - CN);
B01J 27/051 (2013.01 - CN); **B01J 27/0515** (2013.01 - CN); **B01J 27/19** (2013.01 - CN); **B01J 35/635** (2024.01 - CN); **B01J 35/647** (2024.01 - CN);
B01J 35/66 (2024.01 - CN); **B01J 37/009** (2013.01 - CN); **B01J 37/203** (2013.01 - CN); **B01J 37/04** (2013.01 - CN); **B01J 37/08** (2013.01 - CN);
B01J 37/20 (2013.01 - CN); **B01J 37/28** (2013.01 - CN)

Citation (search report)
See references of WO 2016073560A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2016073560 A1 20160512; BR 112017009662 A2 20171219; CA 2966629 A1 20160512; CA 2966629 C 20230103;
CN 107109249 A 20170829; CN 107109249 B 20220318; EP 3215268 A1 20170913; JP 2018501104 A 20180118; JP 6685317 B2 20200422;
KR 102431659 B1 20220810; KR 20170078653 A 20170707; RU 2017119439 A 20181206; RU 2017119439 A3 20190517;
TW 201622816 A 20160701; TW I674150 B 20191011; US 10610854 B2 20200407; US 2016129428 A1 20160512; US 2020188890 A1 20200618

DOCDB simple family (application)
US 2015058964 W 20151104; BR 112017009662 A 20151104; CA 2966629 A 20151104; CN 201580058079 A 20151104;
EP 15801014 A 20151104; JP 2017543293 A 20151104; KR 20177011701 A 20151104; RU 2017119439 A 20151104;
TW 104136381 A 20151104; US 201514932176 A 20151104; US 202016801441 A 20200226